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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/620,318 | 07/14/2003 | Paul V. Cooper | 23438.00041 | 7946 |

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EXAMINER

KASTLER, SCOTT R

ART UNIT

PAPER NUMBER

1793

MAIL DATE

DELIVERY MODE

02/25/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/620,318

Applicant(s)

COOPER, PAUL V.

Examiner

Scott Kastler

Art Unit

1793

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 January 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14, 16-26, 38 and 39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14, 16-26, 38 and 39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(c), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(c) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/16/2009 has been entered.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 14, 16, 17, 19, 20 and 38 are rejected under 35 U.S.C. 102(b) as being anticipated by US 4,767,230 to Leas, Jr. (Leas). Leas teaches a coupling (see figure 3 for example) which could be employed if desired for coupling gas transferring shafts or conduits in a molten metal device (see col. 4 lines 15-21 for example) including a coupling member (10) which can be connected to a second coupling member (12 in fig. 1 for example), where the coupling member includes a bore having an opening with proximal and distal ends where the proximal end is threaded (48) with “coarse” threads and the distal end (42) is smooth and tapered with no threads, where the coupling member further includes a section (32) which would act as a counterweight and further includes one or more apertures for receiving a tool for shaft removal

(see fig 2 for example) thereby showing all aspects of the above claims since the recited manner or method of use of the claimed apparatus (for use in delivering gas in a molten metal device) cannot be relied upon to fairly further distinguish claims to the apparatus itself when, as in the instant case, the apparatus disclosed by the prior art could perform the recited function if desired, whether or not such a use is disclosed or desired by the applied prior art. See MPEP 2114 and 2115.

Claims 14, 16, 18 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Howie et al. Howie et al teaches a coupling (66) see col. 5 lines 10-30 for example, including a smooth tapered end and a threaded end with a bore opening in between made of stainless steel showing all aspects of the above claims since the recited manner or method of use of the claimed apparatus (for use in delivering gas in a molten metal device) cannot be relied upon to fairly further distinguish claims to the apparatus itself when, as in the instant case, the apparatus disclosed by the prior art could perform the recited function if desired, whether or not such a use is disclosed or desired by the applied prior art. See MPEP 2114 and 2115.

Claims 21, 22, 26 and 39 are rejected under 35 U.S.C. 102(b) as being anticipated by Mordue'467. Mordue'467 teaches a coupling system (44) in a rotary degasser including a bore of a second coupling (52) with proximal and distal ends attached to a first coupling (56) which is attached to a motor shaft and where the second coupling has a distal end (54) which is tapered (a 30 degree taper in figure 4A) and is smooth as well as including apertures for tool insertion (see col. 7 lines 5-15 for example), thereby showing all aspects of the above claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mordue'467 in view of Howie et al. As applied to claim 21 above, Mordue'467 shows all aspects of the above claims except the use of threads on the non-tapered bore end or the use of stainless steel for the coupling material. As applied to claim 14 above, Howie et al teaches that the use of a coupling with a threaded end with "coarse" threads where the coupling is made of made of stainless steel was known in the art at the time the invention was made in order to provide secure connection of components. Because Mordue'467 requires some type of material for the coupling construction and also desire secure component connections, motivation to employ both the threaded end of Howie et al and the stainless steel construction of Howie et al in the coupling system of Mordue'467 would have been modifications obvious to one of ordinary skill in the art at the time the invention was made.

Response to Arguments

Applicant's arguments filed on 1/16/2009 have been fully considered but they are not persuasive. Applicant's arguments that neither of Mordue'467 or Howie et al teach bores that have a tapered end is not persuasive. Mordue'467 in figure 4A at end 54 has a taper of 30 degrees while Howie et al has a coupling (66) where the bore has a threaded end and a tapered

end corresponding to the taper and threads on the member (51), see col. 5 lines 10-35 of Howie et al for example. Applicant's arguments regarding the other previously cited references are now moot in view of the withdrawal of the rejections based upon those references.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Kastler whose telephone number is (571) 272-1243. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Scott Kastler/
Primary Examiner, Art Unit 1793

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